

**Evidence Based Policy and Systems Thinking  
(with particular reference to interventions to promote “development” in early childhood).**

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This commentary began life as a note to a speaker who had contributed to an Open Day of the *Society for the Study of Systems Thinking and Cybernetics in Organisations (SCiO)*. His aim was to apply systems thinking, and VSM in particular, to the implementation of policies based on what are often taken to be the conclusions to be drawn from research into the factors which influence early childhood development and therefore the adults those children will become.

Having worked quite extensively in the area myself, I felt distinctly uneasy about a number of things that were being said but was unable to say much in the discussion. So I ended up writing to the author along the lines largely reproduced below.

I began with some remarks derived from “recent” demonstrations of largely unexpected and dramatic effects which radically challenge conventional ways of thinking about perception itself but which also have serious implications for thinking about the nature of science and social policy in particular.

Probably readers of this note have seen a video in which viewers are asked to identify the more effective moves made by the players in a handball game.

And this they do.

At this point the researcher asks “And what about the gorilla?”

“What gorilla?”

When the video is re-run, it emerges that a gorilla has walked across the pitch in the middle of the game. Yet very few viewers saw him the first time round.

This has major implications for the formulation of policy and, indeed, for the conduct of science itself.

Last night I saw a film about the so-called cover-up of the evidence concerning smoking and global warming.

The film was interpenetrated by a magician illustrating that it is wrong to say that card tricks are orchestrated by “sleight of hand”. Rather, they depend on the brain not seeing what is there for all to see and which everyone looking actually sees.

By implication it was suggested that the “cover up” involved distraction so that few saw what was there for all to see.

Most scientific advance comes, not from technological innovation, but from someone looking down the same microscope, at the same slide as everyone else, but seeing something different.

That is the point of undergraduate training in zoology and geology.

But not only do the students come to see the colours and shapes on the slide in new ways, they come to see - and draw - things that are *not* there to be seen!

Most innovation comes, not from separate cadres of smart innovators but from the pervasive activities of many people.

And therein lies the hope.

But it does depend on a pervasive climate of innovation in every nook and cranny of organisations. More specifically, it depends, among other things, not only on setting aside time for such work but also on promoting recognition of multiple talents and contributions that are not listed in job descriptions and staff appraisal exercises. Only in this way is it possible to create climates of enterprise dependent on the pervasive emergence of multiple small groups capable of undertaking the diverse activities required for innovation.

Thus the direction of innovation cannot be pre-specified through some command and control structure.

But the climates can be stifled, enhanced, and orientated by those who find their way into influential positions.

But that in itself is a largely circular statement because those people are themselves selected and promoted largely by those climates.

And so to the point.

John Seddon’s interesting and engaging book suffers from not having engaged in “systems thinking” about the context in which the “systems” he is seeking to reform are operating.

Why concern oneself with delivering “benefits” efficiently when those benefits are minimal and the system within which they are being provided is demeaning and degrading both at the level of the recipients and the society within which they are operating?

How to understand and influence that system?

Not in the way that the vast majority of Marx’s followers have understood his work. (Marx himself was right: the problem is to understand *capitalism*, not to eliminate *capitalists*.)

Developing an understanding of such systems and how to intervene in them is, I would argue, the central task of sociocyberneticians.

One of the central observations to be made about the system within which we live is that it is “run” by people who do not engage in systems thinking about the services they are supposedly appointed to run.

This is no armchair observation. We interviewed a number of senior civil servants and university vice chancellors and principals and were shocked to find how few were at all concerned about this. They were mostly preoccupied with the question of how to grow their empires and thus advance themselves.

So the “circles of care” set up to provide services to (or, better, intervene in the lives of) families and children are not set up in the context of systems thinking about the societal “causes” of those problems but mainly in the context of systems thinking about how to advance the careers of those designing the networks which are supposed to provide them.

I have interviewed many teachers and clinical psychologists who were very distressed about the dysfunctional nature of many of the “services” they were supposed to provide. Problem was it would be “more than their jobs worth” to try to do something about the situation in which they find themselves.

This narrow concern with job security and advancement is reflected in most studies of “competence”. These typically fail to consider the nature of professionalism and reflect that in staff appraisal arrangements.

Going back to Seddon and the delivery of efficient “remedial” services.

He can be said to have a remarkable blindspot.

He is fond of quoting a very important finding from systems research: 94% of the variance of behaviour in organisations is determined by variance in systems constraints and processes and only 6% by individuals.

So the problem is neither to fix the benefits system nor the nominally dysfunctional behaviour of the recipients but to ask what are the systems processes that lead to this situation and how could one intervene in them.

This, you will appreciate, is one of the shifts that are needed vis a vis many of the families and children who are deemed to be in need of “caring services”.

That involves changes in job definitions, embracement of professionalism, and changes in staff appraisal procedures.

I need to repeat and underline the significance of these astounding findings from systems research.

They involve nothing less than turning psychology inside-out.

They involve seeking to understand behaviour not, mainly, by looking at the internal, psychological, characteristics of individuals but at the external social forces which act upon them.

This involves a Newtonian transformation in thinking.

Before Newton, if moving objects changed direction etc. it was because of their internal properties. They were “animated”. After Newton it was mainly because they were acted upon by a network of *external* forces which could nevertheless be mapped, measured, and harnessed.

Looking through the same telescope one saw something else.

And so to the “needs” of all those needy children and families.

First to say a few words about the “knowledge base”.

There is a huge mountain of publications dealing with what are misleadingly called “cognitive” abilities and “educational” outcomes.

At the last count there were more than 1,300 *meta* analyses of the tens of thousands of studies of millions of pupils of “what works in education”. There are even more on “IQ”. And perhaps a similar number purporting to show that “home background” is an important determinant of these things.

BUT

1. There has been virtually total neglect of the observations by Spearman (who “discovered” *g*) that (a) “every normal man, woman, and child is a genius at something but current assessment procedures do not enable us to identify what it is” and (b) that neither the tests from which *g* had emerged nor measures of *g* themselves have any place in schools because they distract the attention of parents, pupils, teachers and politicians from the true business of education – which is to nurture all these diverse talents.
2. Directly related to this, there are virtually no studies of parents’ ability to nurture high level and diverse talents. (In fact, parents are their children’s most important educators, not in the sense that they do the things which teachers do but in the sense that they, and they alone, nurture such qualities as self-confidence, initiative, and the ability to understand the situation in which they find themselves.)
3. There is widespread *disrespect* for working class values – ie the satisfactions “working class” people want from life and the qualities they want their children to develop - among professional service providers.
4. Related to the last two, there has been very little study of the situational constraints (including the so-called “benefits” system) which *prevent* many mothers nurturing the abilities they want their children to develop. In fact, once these situational constraints are remediated, they are able, instinctively, to behave in ways which nurture their children’s growth .... which does not necessarily coincide with the type of growth favoured by middle class researchers and “providers”.

One has to ask how all this has come about.

And this is a job for sociocyberneticians.

But one component is that the “educational” system is not, as everyone knows, about education but about gaining senseless “qualifications” which help to secure entry to jobs.

Another is the enormous lucrative international market for those working on “high stakes testing” and engineering high scores on norm-referenced tests in the international educational Olympics (which is of concern only to administrators and politicians).

Another is the difficulties involved in generating an appropriate framework for thinking about multiple talents and the way they contribute to emergent properties in groups. Developing such a framework requires a paradigm shift in ways of thinking which is itself dependent on (a) harnessing multiple talents to the task and then (b) undermining that on which the lives, livelihoods, and careers of hundreds of thousands of people are based.

But there is also a more insidious process at work.

As we have seen, our society is run by what Mill, Smith, and Hayek called “committees of ignoramuses” ... People who know little about the issues about which they are taking decisions, who fail to engage in systems thinking in relation to those issues (and who instead trade in sound-bites) and who are, in any case, more concerned with their own advancement than those they are nominally there to serve.

Now. It has come to pass that one of the phrases which generates esteem in this process is “evidence based policy.”

But, through a social process which converts everything into its opposite (and which it is vital to try harder to understand), this is converted into “policy based evidence”.

This in part comes about because researchers can only get grants for working on things chosen by ideologically-oriented superiors and conceptualised in terms of those frameworks.

But it also comes about through a largely unnoticed, and certainly unprotestd, change in research contracts introduced by the Thatcher government. Researchers are specifically precluded from investigating issues (eg the *dysfunctional* effects of policy) that they have not been asked to investigate and prohibited from saying anything without the specific approval of the commissioning department.

And so to conclude.

It would seem desirable to use the limited latitude available to those who have some control over research and policy funding and policy to try to:

- commission action-research, incorporating *comprehensive* evaluation, into the situational determinants of situations which seem to demand multiple interventions from these armies of uncoordinated service providers.
- create a situation in which these multiple providers can contribute to a pervasive climate of innovation.
- encourage SCiO to think more deeply about the forms of governance required to manage complex organisations (societies).

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Although it involves a slight change of tone, I would, at this point, like to share some reflections emerging from my involvement in another discussion.

In my mind it seemed to emerge that the *real* questions for evidence based policy ... which are not the one's researchers normally seek to answer and perhaps imply a further shift to Bayesian notions ... are:

1. What are the chances that these proposals, if implemented, would lead to the desired outcomes?
2. How important are the causal factors it is proposed to tackle compared with other processes contributing to the same outcome?
3. How important are these outcomes compared with other outcomes which might be achieved at similar time, energy, and social costs?
4. What *are* the probable costs? These should include not only an assessment of the direct and indirect (including the social costs to the individuals concerned of investigations which are not pursued to prosecution and legal action which fails) financial costs to the public purse and the financial costs to the individuals involved, but also include such things as cost to the public in terms of lost opportunity to do other things and costs to individuals somehow involved ... such as intrusions into, and disruptions of, family life of *all* those likely to be affected ... including, for example, the serious disruption of the family lives of those investigated but never prosecuted\*.

\*More specifically, this involves an assessment of *all* the desired and desirable, intended and unintended, short and long term, effects for those directly and indirectly affected and for society as a whole.

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Below are some references to publications that readers may be interested to dip into.

But, first, here are some references to what I consider to be deeply intrusive and dangerous tools that are currently being widely used to assess children's well-being and parents' child rearing practices in order to prescribe "remediation", including the imprisonment of parents who fail to send their children to school.

GIRFEC

<http://www.scotland.gov.uk/Topics/People/Young-People/gettingitright/background/wellbeing/printable-guide>

<http://www.scotland.gov.uk/Topics/People/Young-People/gettingitright/background/wellbeing>

SHANARRI

<https://www.google.co.uk/search?q=SHANARRI&client=firefox-a&hs=4nj&sa=X&rls=org.mozilla:en-GB:official&channel=np&tbn=isch&imgil>

On the societal creation of "problems" and then attributing them to individuals who are then said to be in need of treatment – and thus the establishment of networks of professional carers:

Raven, J. (2014). **Dyslexia – getting it wrong**. *The Psychologist*, vol. 27, no. 11, November 2014, p809 <http://eyeonsociety.co.uk/resources/Dyslexia.pdf>

On the diversity of educational priorities, the nurture of multiple talents, and the developments needed in public management arrangements ... a summary of a lifetime's work:

Raven, J. (1994). *Managing Education for Effective Schooling: The Most Important Problem Is to Come to Terms with Values*. Unionville, New York: Trillium Press. [www.rfwp.com](http://www.rfwp.com); Edinburgh,

Scotland: Competency Motivation Project, 30, Great King Street, Edinburgh EH3 6QH. Some chapters available at: [http://eyeonsociety.co.uk/resources/fulllist.html#managing\\_education](http://eyeonsociety.co.uk/resources/fulllist.html#managing_education)

**On the need for professionalism in shifting the focus of remediation in the educational system.**

Raven, J. (2011). Toward professionalism in psychology and education. *Psychology of Education Review*, 35(2), 5-20.

<http://www.eyeonsociety.co.uk/resources/towardsProfessionalismInPsychology.pdf>

Raven, J. (2012). Toward professionalism in psychology and education. *Psychology of Education Review*, 36(1), 3-18, along with *Author' response to peer commentary*, pp. 38-43.

Raven, J. (2012). Competence, education, professional development, psychology, and socio-cybernetics. Chapter 16 in G. J. Neimeyer (Ed.), *Continuing Education: Types, Roles, and Societal Impacts*. Hauppauge, New York: Nova Science Publishers, Inc.

[http://www.eyeonsociety.co.uk/resources/CPDAPA\\_REVISED\\_FULL\\_VERSION.pdf](http://www.eyeonsociety.co.uk/resources/CPDAPA_REVISED_FULL_VERSION.pdf)

**On the deeply unethical implications of the misinterpretation and misapplication of "intelligence"**

Raven, J. (2008). Intelligence, engineered invisibility, and the destruction of life on earth. In J. Raven & J. Raven (Eds.) *Uses and Abuses of Intelligence: Studies Advancing Spearman and Raven's Quest for Non-Arbitrary Metrics*. Unionville, New York: Royal Fireworks Press; Edinburgh, Scotland: Competency Motivation Project; Budapest, Hungary: EDGE 2000; Cluj Napoca, Romania: Romanian Psychological Testing Services SRL. (Chapter 19, pp. 431-471). Also available at

<http://www.eyeonsociety.co.uk/resources/UAIChapter19.pdf>

**On intervention as interference**

Raven, J. (1980). Intervention as interference. *Scottish Educational Review*, 12, 120-130.

**On the need for SCiO, RC51, and Systems Dynamics to address the issue of governance**

Hornung: invitation to SCiO and RC51 members.

<http://eyeonsociety.co.uk/resources/InvitMC.pdf>

Aidan Ward: systems notions of governance:

<http://eyeonsociety.co.uk/resources/Systems%20notions%20of%20governance%20and%20real%20world%20challenges41.pdf>

**Toward an alternative answer to Smith and Hayek's quest for a societal management system which would innovate and learn without central direction.**

Raven, J. (1995). *The New Wealth of Nations: A New Enquiry into the Nature and Origins of the Wealth of Nations and the Societal Learning Arrangements Needed for a Sustainable Society*.

Unionville, New York: Royal Fireworks Press [www.rfwp.com](http://www.rfwp.com); Edinburgh, Scotland: Competency Motivation Project. [http://eyeonsociety.co.uk/resources/fulllist.html#new\\_wealth](http://eyeonsociety.co.uk/resources/fulllist.html#new_wealth)

**On mapping, measuring, and harnessing social forces.**

Raven, J., & Gallon, L. (2010). Conceptualising, mapping, and measuring social forces. *Journal of Sociocybernetics*, 8, 73-110.

[http://www.unizar.es/sociocybernetics/Journal/journal\\_1\\_2\\_2010\\_1.pdf](http://www.unizar.es/sociocybernetics/Journal/journal_1_2_2010_1.pdf)

(Earlier version also available at <http://eyeonsociety.co.uk/resources/scio.pdf>)